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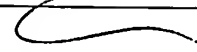
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,239	10/13/2003	Dale H. Haunschild	59058US002	3018
32692	7590	04/01/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			ROSSI, JESSICA	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

1733

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. ^{RV} 10/684,239	Applicant(s)  HAUNSCHILD ET AL.	
	Examiner Jessica L. Rossi	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/25/05, Election.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/13/03, 2/9/05</u> | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-19, in the reply filed on 1/25/05 is acknowledged. Applicant presented no grounds for the traversal. Therefore, the requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, it is unclear if the protrusions are on both the major and opposing surfaces of the base sheet or just the major surface. Applicant is asked to clarify. Based on the specification, it appears Applicant intends the latter. It is suggested to amend the claim to state -providing a conformable base sheet comprising a major surface having a plurality of protrusions thereon and an opposing surface--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-3, 5-6, 8 and 11-19 rejected under 35 U.S.C. 102(b) as being anticipated by Bacon et al. (US 6127020; provided in IDS).

With respect to claim 1, Bacon is directed to making a retroreflective material (abstract). The reference teaches the method steps consisting essentially of providing a conformable base sheet 34 having a major surface with protrusions thereon and an opposing surface, providing an enclosed-lens retroreflective sheeting 30 having a viewing surface and an opposing surface, and bonding the opposing surface of the retroreflective sheeting to the major surface of the base sheet (Figure 3; column 4, lines 23-52; column 8, lines 57-59).

Regarding claims 2-3, the reference teaches such (Figure 3).

Regarding claims 5-6 and 12, the reference teaches such (column 15, lines 14-20).

Regarding claim 8, the reference teaches such (column 8, lines 37-38).

Regarding claims 11 and 13, the reference teaches such (column 8, lines 11-20; column 15, lines 7-53).

Regarding claims 14-16, the reference teaches such (column 4, lines 44-47; column 8, lines 31-36 and 57-59).

Regarding claim 17, the reference teaches such.

Regarding claims 18-19, the reference teaches such (column 5, lines 38-50).

6. Claims 1-3, 5-8, 12 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama (US 5975706; provided in IDS).

With respect to claim 1, Nakayama is directed to making a retroreflective material (abstract). The reference teaches the method steps consisting essentially of providing a conformable base sheet 1 having a major surface with protrusions 4 thereon and an opposing

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surface (Figure 1; column 2, line 64 – column 3, line 10; column 7, lines 54-58), providing an enclosed-lens retroreflective sheeting 2 having a viewing surface and an opposing surface (column 3, lines 5-9; column 6, lines 18-20), and bonding the opposing surface of the retroreflective sheeting to the major surface of the base sheet (Figure 1; column 3, lines 49-53; column 6, lines 56-60).

Regarding claims 2-3, the reference teaches such (Figure 1).

Regarding claims 5-7 and 12, the reference teaches such (column 3, lines 50-53; column 6, lines 56-60; column 8, lines 10-13).

Regarding claim 8, the reference teaches such (column 3, lines 49-53).

Regarding claims 18-19, the reference teaches such (column 3, lines 15-18).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon et al. as applied to claim 5 above and further in view of Nakayama.

Regarding claim 5, the skilled artisan reading Bacon as a whole would have appreciated that a type of adhesive layer is not critical to the invention and therefore would have been motivated to use a hot melt as an alternative to a PSA because such is known in the art for bonding a retroreflective sheeting to a base sheet having protrusions thereon, as taught by Nakayama (column 6, lines 56-60), where only the expected results would have been achieved.

9. Claims 4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama as applied to claim 1 above and further in view of the collective teachings of Kelley et al. (US 6303058; provided in IDS) and Benson (US 4703999).

Regarding claims 4 and 9-10, Nakayama is silent as to this limitation. It is known in the art to provide a retroreflective sheeting 10 in a gathered configuration comprising a plurality of cavities (a.k.a. "embossing") before bonding the same to a support material 14 such that the length of the sheeting after bonding is no more than 10% greater than its initial length, as taught by Kelley (Figure 3; column 7, lines 40-45). It is also known in the art to form a retroreflective material by separately embossing two layers before bonding them to each other such that the cavities of one layer are occupied by the protrusions of the other layer, as an alternative to embossing one layer and conforming the other un-embossed layer to the protrusions and cavities of the embossed layer, as taught by Benson (Figure 5-6; column 3, lines 50-60; column 4, lines 30-61; column 5, lines 9-22).

The skilled artisan would have appreciated that Nakayama is not particularly concerned with how the protrusions are formed in the retroreflective material since the reference teaches forming the retroreflective material by laminating the base sheet and retroreflective sheeting and then embossing the laminate to form the protrusions, or alternatively, laminating an un-embossed retroreflective sheeting to an embossed base sheet such that the un-embossed sheeting conforms to the protrusions and cavities of the embossed sheet (column 3, lines 49-55; column 7, lines 54-58).

Therefore, it would have been obvious to the skilled artisan at the time the invention was made to provide the retroreflective sheeting of Nakayama as an embossed sheeting before

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bonding it to the embossed base sheet of Nakayama because such is known in the art as an alternative to conforming an un-embossed layer to the protrusions and cavities of an embossed layer, as taught by the collective teachings of Kelley and Benson, where this prevents the retroreflective sheeting from stretching more than 10% its initial length thereby reducing the chance of damage to the retroreflective sheeting.

10. Claims 11 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama as applied to claim 1 above, and further in view of Bacon et al.

Regarding claims 11 and 13, it would have been obvious to the skilled artisan to bond the retroreflective sheeting and base sheet of Nakayama in a continuous process because such is known in the art, as taught by Bacon (see paragraph 5 above), where this expedites the manufacturing process.

Regarding claims 14-16, the skilled artisan reading Nakayama would have appreciated the reference is not at all concerned with using particular materials for the base sheet. Therefore, selection of materials would have been within purview of the skilled artisan. However, it would have been obvious to the skilled artisan to use the claimed materials because such is known in the art, as taught by Bacon (see paragraph 5 above).

Regarding claim 17, it would have been obvious to heat the base sheet before bonding because such is known in the art, as taught by Bacon (see paragraph 5 above), where this softens the base sheet making it easier to bond the retroreflective sheeting thereto.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

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Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,127,020 in view of Nakayama.

The claims of the '020 patent teach all the limitations of the presently claimed invention except the configuration member having first and second portions before bonding the same to the retroreflective sheeting. It is noted that the '020 patent teaches such (see paragraph 5 above). However, it would have been obvious to form the first and second portions (= protrusions) in the configuration member before bonding the same to the retroreflective sheeting because such is known in the art as an alternative to forming the protrusions after bonding, as taught by Nakayama (column 3, lines 49-55; column 7, lines 55-58).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jessica L. Rossi
Art Unit 1733